YOGA, HEALTH AND LEISURE: AN OBSERVATION

Prof. Aradhana Shukla
Senior Fellow (ICSSR)
Department of Psychology
S.S.J. University, Almora
Email: aradhana.shukla5@gmail.com

Abstract

This study was aimed to ascertain the impact of yogic exercisers and employment status on everyday life from a developmental perspective. It was contended that:

1. An increase in age would cause more perception of ill health and more prone towards leisure activities.

2. Regular Yogic exercisers would perceive their health as more positive and engaged in leisure activities as compared to seldom yogic exercisers.

3. Employed women would be less engaged in leisure activities but would rate their health better as compared to unemployed women.

One hundred and twenty participants ranging between 30-55 years were served as participants and were arranged according to the requirements of the factorial design with three levels of chronological age (30-35, 40-45, 50-55 years), two types of yogic exercisers (Regular and Seldom) and two types of employment (Employed and Unemployed), i.e., 10 participants in each cell.

In order to find out everyday life measures of leisure activities and self-rated health developed by the investigators were used. Data collection was done individually/in graph and analysis of variance was used to analyze the data. It was found that:

(1) Self-rated health was relatively high in the youngest participants and they were engaged in varieties of leisure activities.

(2) Regular yogic exercisers were higher in self-rated health and they were engaged in more variation of leisure activities than seldom exercisers.

(3) Employed women experiences themselves healthier and highly engaged in leisure than unemployed women.

(4) All interactions were significant.

Keywords

Yoga, Leisure, Self-related health.

Reference to this paper should be made as follows:
Received: 14.02.2022
Approved: 15.03.2022

Prof. Aradhana Shukla

YOGA, HEALTH AND LEISURE: AN OBSERVATION

Article No.02
RJPSS Oct.-Mar. 2022, Vol. XLVII No. 1, pp. 10-23

Online available at:
https://anubooks.com/rjpss-2022-vol-xlvii-no-1/
https://doi.org/10.31995/rjpss.2022.v47i01.002

https://doi.org/10.31995/rjpss.2022.v47i01.002

The philosophy of Yoga and the psychology behind its practice- the two are bound together in such a way that any consideration of the one inevitably has to simultaneously take into account the other, because the practice of yoga is laid upon the basis of a psycho-philosophical background.

Eight limbed paths of yoga include yam (moral code), niyam (discipline), asana (posture or way of sitting during meditation), pranayama (breathing way or practices for the enhancement of life skills or life forces, pratyahara (sensory transcendence), Dharana (retention or concentration), dhyan (meditation) and samadhi (state of bliss). A lot of psychologists have stated its relevance in everyday life (Shroff,2011; Desikachar,2011; Shroff, 2011).

To enjoy a "free time" or "me time" is essential for a person to be healthy from a psychophysical perspective. Also, it provides successful aging (Depp,2006). Leisure activities are meant to make the body relaxed, mind calm and after leisure, both could be ready for work

Keeping these views in consideration this study was planned in the factorial perspective and it was hypothesized that:

1. An increase in age would cause more perception of ill health and more prone towards leisure activities.
2. Regular Yogic exercisers would perceive their health as more positive and engaged in leisure activities as compared to seldom yogic exercisers.
3. Employed women would be less engaged in leisure activities but would rate their health better as compared to unemployed.

Method

This study was planned in the factorial perspective with three levels of chronological age (30-35, 40-45, 50-55 years), two types of yogic exercisers (Regular and Seldom) and two employment statuses (Employed and Unemployed), i.e., 10 participants in each cell. With a total of 12 participants. The schematic presentation of the present study is as follows:

Table 1

Design of the study

	A					
	A1		**A2**		**A3**	
	B1	**B2**	**B1**	**B2**	**B1**	**B2**
C1	**10**	**10**	**10**	**10**	**10**	**10**
C2	**10**	**10**	**10**	**10**	**10**	**10**
						= 120

Legends:

A=	***Levels of Chronological Age***	***C=***	***Types of Employment***
A1=	***30-35 Years***	***C1=***	***Employed***
A2=	***40-45 Years***	***C2=***	***Unemployed***
A3=	***50-55 Years***		
B=	***Types of Yogic exercisers***		
B1=	***Regular***		
B2=	***Seldom***		

Measure : In this study Self Rated Health Scale ***(Shukla, 2010)*** and Leisure Activities Scale (Shukla, 2010) were used and their description is as follows:

Measure of Leisure Activities: Based on ***Willigen and Chadha (1989)*** this scale was developed by Shukla (2010). There are 24 items in this scale in which four types of leisure activities are incorporated they are**:** Cultural, Physical, Social and Solitary. Scope ranges between 24 – 120. A low score indicates high level of involvement in that activities and a high score vice-versa. Split half reliability of this test is 0.76 and inter rated reliability is presented below:

Table 2

Inter-rater reliability of the measure of leisure activities

	A	**B**	**C**	**D**
A	--	.59	.64	.51
B		--	.59	.60
C			--	.49
D				--

Measure of Self-Rated Health : This measure was constructed by Shukla (2010). It consists of 70 items dealing with the assessment of health as perceived by oneself. The score ranges between 70-335. A high score indicates low level of experiential health and a low score vice-versa. The split-half reliability of this test is 0.71 and inter-rated reliability is presented below.

Table 3

Inter-rater reliability of the measure of self-rated health

	A	**B**	**C**	**D**
A	--	.60	.65	.55
B		--	.57	.62
C			--	.50
D				--

https://doi.org/10.31995/rjpss.2022.v47i01.002

Procedure: data collection was done individually or in groups. Best attempts were made to avoid external factors.

Result

Data were analyzed by three-way analysis of variance and interpreted in terms of chronological age, types of yogic exercises and employment status as effectors of self-rated health and leisure activities. Separate ANOVAs were computed for self-rated health and leisure activities. They are given below in two sections:

Impact of chronological age, types of yogic exercises and employment status on self Rated Health: Findings were analyzed by three-way analysis of variance and interpreted in terms of chronological age, types of yogic exercises and employment status as affection of self-rated health. It is appeared in table 4.

Table 4

Summary table of analysis of variance showing the impact of age, types of yogic exercises and employment status on self-rated health

Source of variation	***SS***	***df***	***MS***
A	3.73	2	1.86
B	1.51	1	1.51
C	1.27	1	1.27
AB	4.12	2	2.06
AC	4.08	2	2.04
BC	1.77	1	1.77
ABC	4.96	2	2.48
Error within	29.16	108	0.27
		119	

It was found that the main effect of chronological age was significant (F,2, 119=6.92 P<0.01). It was found that the youngest participants (X=222.88) rated their health more positively than middle age (X=201.39) and older women respectively (X=165.51). The next main effect of types of yogic exercisers was significant (F,1, 119=5.60 P<0.01). It was found that regular exercisers (X=203.65) were higher in self-rated health as compared to seldom exercisers (X=189.53).

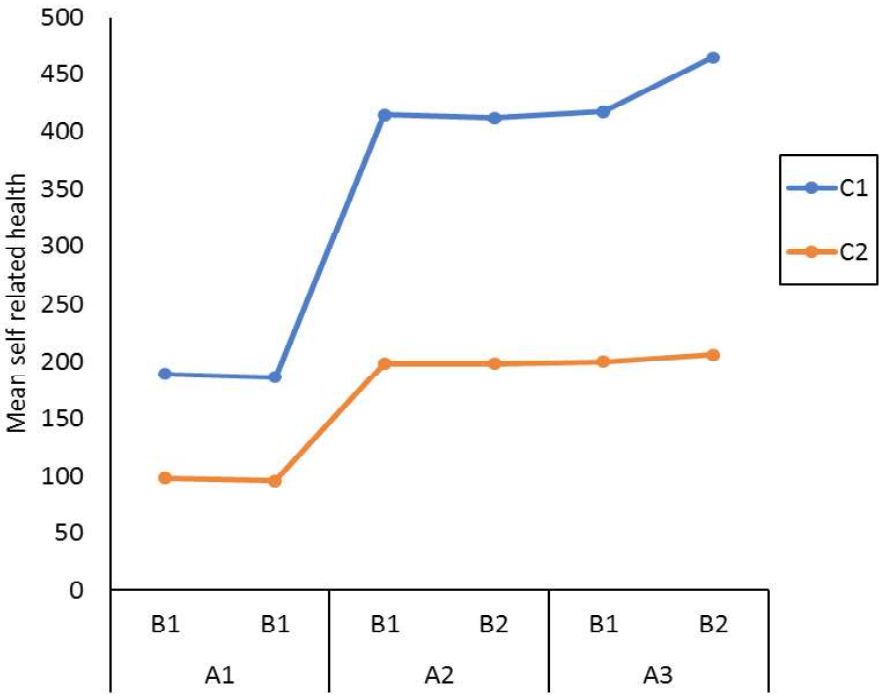
The last main effect of employment status was also significant (F,1, 119=4.64 P<0.05). It was noted that employed women perceived more self-rated health than unemployed women (X=192.84) participants.

The two-way interaction between chronological age and types of yogic exercisers was significant (F,2, 119=7.64 P<0.01). It was appeared that older and seldom exercisers perceived negative self-rated health as compared to younger and regular exercisers.

The chronological age and employment status interaction was also significant (F,2, 119=7.59 P<0.01). It was mentioned that younger and employed women perceived better self-rated health as compared to older and unemployed participants.

The interaction of yogic exercisers and employment status was significant (F,1, 119=6.54 P<0.01). It was appeared that regular and employed participants have better self-rated health as compared to seldom unemployed women. The last interaction of chronological, yogic exercisers and employment was also significant (F, 2, 119=9.19 P<.01) and it is appeared in figure 1.

Figure 1
Impact of age, type of yogic exerecisers and type of employment on self related health



https://doi.org/10.31995/rjpss.2022.v47i01.002

Legends:

A= Levels of Chronological Age
A1= 30-35 Years
A2= 40-45 Years
A3= 50-55 Years

B= Types of Yogic exercisers
B1= Regular
B2= Seldom

C= Types of Employment
C1= Employed
C2= Unemployed

I. Impact of Chronological age, yogic exercisers and employment status on Leisure activities: Findings were analyzed by three-way analysis of variance and interpreted in terms of chronological age, yogic exercisers and employment status. It is appeared in table 5.

Table 5

Summary table of analysis of variance showing the impact of age, types of yogic exercises and employment status on leisure activities

Source of variation	***SS***	***df***	***MS***	***F***
A	12.54	2	6.27	10.64
B	3.19	1	3.19	5.42
C	0.76	1	0.76	1.29
AB	12.60	2	6.30	10.69
AC	11.37	2	5.68	9.64
BC	0.68	1	0.68	1.16
ABC	11.31	2	5.65	9.59
Error within	63.72	108	0.59	
		119		

It was found that the main effect of chronological age was significant (F,2, 119=10.64 P<0.01). It was found that the youngest participants (X=19.71) were more engaged in Leisure activities as compared to middle age (X=11.30) and older (X=3.46) participants.

The main effect of yogic exercisers was significant (F,1, 119=5.42 P<0.05). It was noted that regular exercisers (X=13.43) were more engaged in leisure activities than seldom exercisers (X=9.53). The last main effect of employment status was insignificant (F,1, 119=1.29 P>0.05). It was found that employed women (X=12.42) were more or less similar in leisure activities to unemployed women (X=10.54).

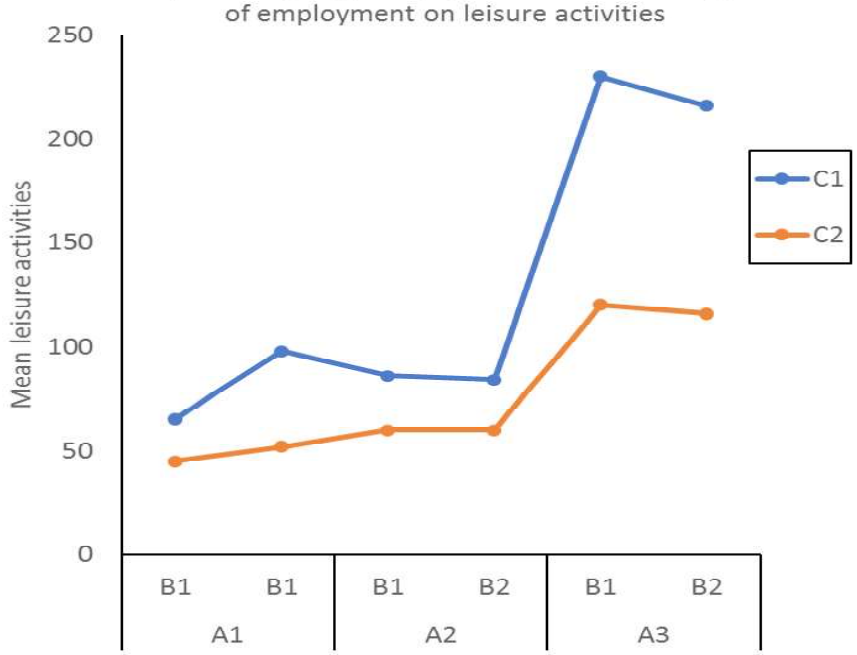
The two-way interaction between chronological age and yogic exercisers was significant (F,2, 119=10.69 P<0.01) and it shows that younger and regular exercisers were more involved in leisure activities than older seldom exercisers.

The next interaction between chronological age and employment status was also significant (F,2, 119=9.64 P<.01). It was found that young and regular exerciser participants were more into leisure activities than older and seldom exercisers.

The interaction between yogic exercisers and employment status was significant (F,1, 119=1.16 P>0.05). It was found that women who are regular yogic exercisers and employed were more or less similar to seldom exercisers and unemployed women.

The three-way interaction between chronological age, types of yogic exercises and types of employment was also significant (F, 2, 119=9.59 P<0.01) and it is appeared in figure 2.

Figure 2
Impact of age, type of yogic exerecisers and type of employment on leisure activities



https://doi.org/10.31995/rjpss.2022.v47i01.002

Legends:

A= Levels of Chronological Age
A1= 30-35 Years
A2= 40-45 Years
A3= 50-55 Years

B= Types of Yogic exercisers
B1= Regular
B2= Seldom

C= Types of Employment
C1= Employed
C2= Unemployed

In this way, the data were analyzed and in sum, they revealed that:

(1) Self-rated health was relatively high in the youngest participants and they were engaged in varieties of leisure activities.

(2) Regular yogic exercisers were higher in self-rated health and they were engaged in more variation of leisure activities than seldom exercisers.

(3) Employed women experiences themselves healthier and highly engaged in leisure than unemployed women.

(4) All interactions were significant.

Discussion

Obtained data were analyzed by analysis of variances and interpreted in terms of age, types of yogic exercises and types of employment in (i) self-rated health and (ii) leisure activities will be discussed accordingly.

(i) Impact of age, types of yogic exercises and types of employment on self-rated health : Our first and foremost concern was related to the developmental impact of types of yogic exercises and employment on self-rated health. It was found better health was experienced more by the youngest as compared to older ones. Also, the experience of better health was evident in regular exercisers. Moreover, it was also seen that the women who were in jobs experienced better health as compared to unemployed women.

Individual characteristics play a role in people's decisions regarding whether and how to seek information for a health condition. Some may be more likely than others to seek information as a coping strategy. (Miller, 1987,1995; Williams Piehota et al. 2005) Steptoe et al.(1991) showed that while monitors had more factual knowledge about their health condition, they were less satisfied with the communication of their medical care although high levels of information seeking have been shown to be associated with effective coping strategies in cancer patients (Ben Tovin et.al. 2002). Other research has supported the idea that those who actively

seek information may have poorer coping skills (Miller, 1995) In addition, individuals may themselves vary in their information seeking and coping styles, in some cases acting as blunders, while in others as monitors, and this may be due to contextual factors such as the person's understanding of the threat posed to them by the situation(Bijttebir, Vertommer and Vander, 2001) and the type of stressor encountered (McCrae, 1984).

Other information-seeking theories examine motivation as a key aspect of information seeking and behavior change. The Extended Parallel Process model has been proposed to explain how people rationalize decisions they make in relation to messages that evoke threat and fear, and how efficacy influences the ability to change(Witte, 1992). It has also been found that African American men have specific behavioral and normative beliefs in relation to seeking information related to prostate cancer that may differ from those of Caucasian American men (Ross, Kohlar, Grimley, Green and Anaderson, 2007). Another theory the Health Belief Model, attempts to explain motivation regarding behavior in relation to goals and values. If someone places high value on their health, it is believed they will engage in behavior to maintain it (Janz & Becker, 1984). Other more comprehensive information-seeking frameworks take into consideration other variables such as the source of information, mechanism, individual differences and external environmental variables such as cultural and socio-economic status(Log & Tse, 2007). These theories tend to explain the motivation for seeking information but do not account for the desire to do so collaboratively.

Given these individual and situational influences on health information seeking, it is perhaps not surprising that people will use new media to explore their health conditions and their needs for both information and social support. Indeed it has been suggested that "sharing ideas and experiences with others through online health support groups may have health benefits (Eng, Gustafson, Handerson, Gimison and Patrick,1999).", and online communities have been described as the "...single most important aspect of the web with the biggest impact on health outcomes (Eysenback, Powel, Rizo and Stern, 2004).".

(ii) Impact of age, types of yogic exercises and types of employment on leisure activities: One of the notions of our experience was to explore the impact of types of yogic exercises and types of employment on leisure activities from a developmental perspective. Our hypothesis was approved and we found that all variables laid their impact on leisure activities.

Although women live longer than men, physical limitations and chronic health conditions tend to increase as women age (Gibson, 1996). The importance

and maintenance of leisure activities and their relationship to health promotion among older adults has been well documented (Bruce & Katzmarzyk, 2002; Chou, Chow, & Chi, 2004; Fitzpatrick, 1995; Fitzpatrick, Kressin, Boss´e, Spiro III, & Greene, 2001), and evidence is clear that exercise reduces mortality, especially among older adults (Lan, Chang, & Tai, 2006). Leisure participation is also significantly associated with better physical health among older women and is related to fewer postmenopausal symptoms and hip fractures, less osteoporosis, and better cognition (Andersen, Crespo, Franckowiak, & Walston, 2003; Cousins & Witcher, 2004; Feskanich, Willett, & Colditz, 2002; Fogel & Carison, 2006). In a recent study by Gosselink and Myllykangas (2007), it was found that older women living with HIV/AIDS who participated in leisure activities exhibited resilience in overcoming barriers in time for, access to, and the meaning of leisure as a "spiritual transcendence." A spiritual view of leisure was experienced as a metaphor "for the meaning of life" (p. 1).

In the later stages of life, there are an increased number of older single people mostly due to widowhood, divorce, separation, or singlehood. Demographics reveal that a high proportion of older women do not remarry (Bulcroft & O'Connor, 1986). Researchers have documented the health benefits of meaningful relationships (Hawkins & Booth, 2005; Rutledge, Matthews, Lui, Stone, & Cauley, 2003; Spotts et al., 2005) however, especially dating relationships, on quality of life among older persons (Bulcroft & O'Connor, 1986). Older women are said to receive emotional benefits and even prestige from dating relationships. In another recent study, researchers compared the quality of cohabitating relationships among older and younger adults and found that the older group exhibited higher levels of relationship "quality and stability" than the younger group, but they were less likely to marry (King & Scott, 2005). Brooks and Magnusson (2007), in a more recent study, examined physical activity as leisure relating to health and well-being among adolescent women.

These findings may lend some support for the protective nature of different types of dyadic unions, specifically cohabitating and dating relationships among aging women, which may, in turn, affect mental and physical health. The relationship among dyadic quality, leisure activities, and health also can be clarified by considering the main-effects model (Fitzpatrick, 1995; Thoits, 1982). Additionally, theories of social interaction claim that social interaction protects the individual from feelings of despair by asserting the main effect on well-being (Thoits, 1982). Research indicates that social support in the form of marital closeness can be seen as a supportive resource and has been associated with

moderating the negative impact of cognitive impairment (Tower, Kasl, & Moritz, 1997). The quality of the dyadic relationship combined with participation in leisure activities, therefore, can be conceptualized as a form of social support having a mediating and main effect on mental and physical health conditions (Wheaton, 1985). Studies also have used the main-effects model as a theoretical base to examine the mediating role of marital quality on depressed affect among older adults (Bookwala & Jacobs, 2004; Bookwala & Schulz, 2000). In summary, we find that perspectives in the literature from the main-effects model (Fitzpatrick, 1995; Thoits, 1982) support the view that the quality of different types of dyadic relationships and participation in leisure activities will have a positive relationship with mental and physical among older women (Andersen et al., 2003; Cousins & Witcher, 2004; Feskanich et al., 2002; Fogel & Carison, 2006).

The Avenue of future research is to explore potential clinical applications of experiential patient engagement and learning in online environments. Individual stories that are propagated using collaborative applications through popularity ratings may promote learning but may also effectively submerge information that has in fact been verified by formal research. By tracing the online spread of such ideas via network analysis, models of online information flow in collaborative Web applications could be developed.

References

1. Andersen, R., Crespo, C., Franckowiak, S., & Walston, J. (2003). Leisure-time activity among older U.S. women in relation to hormone-replacement-therapy initiation. *Journal of Aging and Physical Activity*, *11*. **Pg. 82–89.**
2. Ben-Tovim, DI., Dougherty, MLG., Stapleton, AMF. & Pinnock, CB. (2002). Coping with prostate cancer: a quantitative analysis using a new instrument, the center for clinical excellence in urological research coping with cancer instrument. *Urology*, 59. **Pg. 383-8.**
3. Bijttebier, P., Vertommen, H., Vander. & Steene, G. (2001). Assessment of cognitive coping styles: A closer look at situation-response inventories. *Clinical Psychology Review*, 21. **Pg. 85-104.**
4. Bookwala, J., & Jacobs, J. (2004). Age, marital processes, and depressed affect. *The Gerontologist*, *44*. **Pg. 328–338**
5. Bookwala, J., & Schulz, R. (2000). A comparison of primary stressors, secondary stressors, and depressive symptoms between elderly caregiving husbands and wives: The caregiver health effects study. *Psychology and Aging*, *15*. **Pg. 607–616.**

6. Brooks, F., & Magnusson, J. (2007). Physical activity as leisure: The meaning of physical activity for the health and well-being of adolescent women. *Health Care for Women International*, *28*. **Pg. 69–87.**
7. Bruce, M., & Katzmarzyk, P. (2002). Canadian population trends in leisure-time physical activity levels, 1981–1998. *Canadian Journal of Applied Physiology*, *27*. **Pg. 681–690.**
8. Bulcroft, K., & O'Connor, M. (1986). The importance of dating relationships on quality of life for older persons. *Family Relations*, *35*. **Pg. 397–401.**
9. Chou, K., Chow, N., & Chi, I. (2004). Leisure participation amongst Hong Kong Chinese older adults. *Ageing & Society*, *24*. **Pg. 617–629.**
10. Cousins, S., & Witcher, C. (2004). Older women living in the bingo stereotype: 'Well, so what? I play bingo. I'm not out drinkin'. I'm not out boozin." *International Gambling Studies*, *4*. **Pg. 127–146.**
11. Depp, C.A. & Jeste, D.V. (2006). Definitions and predictors of successful aging: a comprehensive review of larger quantitative studies. *American Journal of Geriatric Psychiatry*, *14.* **Pg. 6-20.**
12. Desikachar, T.K.V. (2011). *The heart of yoga : Developing a personal practice* Eng TR, Gustafson DH, Henderson J, Jimison H &Patrick K (1999). Introduction to evaluation of interactive health communication applications. Science Panel on Interactive Communication and Health. *American Journal of Prev Medicine*, *16*. **Pg. 10-5.**
13. Eysenbach, G., Powell, J., Englesakis, M., Rizo, C. & Stern, A. (2004). Health-related virtual communities and electronic support groups: a systematic review of the effects of **online** peer-to-peer interactions. *BMJ*, *328*. **Pg. 1166.**
14. Feskanich, D., Willett, W., & Colditz, G. (2002). Walking and leisure-time activity and risk of hip fracture in postmenopausal women. *JAMA: Journal of the American Medical Association*, *18*. **Pg. 2300.**
15. Fitzpatrick, T. R. (1995). Stress and well-being among the elderly: The effect of recreational services. *The Journal of Applied Social Sciences*, *19*. **Pg. 95–105.**
16. Fitzpatrick, T. R., Kressin, N. R., Boss´e, R., Spiro III, A., & Greene, E. (2001). Leisure activities and health among bereaved elderly men: The normative aging study. *OMEGA: Journal of Death and Dying*, *43*. **Pg. 217–245.**
17. Fogel, J., & Carison, M. (2006). Soap operas and talk shows on television are associated with poorer cognition in older women. *Southern Medical Journal*, *99*. **Pg. 226–233.**
18. Gibson, D. (1996). Broken down by age and gender: The problem of old women redefined. *Gender and Society*, *10*. **Pg. 433–448.**

19. Gosselink, C., & Myllykangas, S. A. (2007). The leisure experiences of older U.S. women living with HIV/AIDS. *Health Care for Women International*, *28*. **Pg. 3–20.**
20. Hawkins, D., & Booth, A. (2005). Unhappily ever after: Effects of long-term, low-quality marriages on well-being. *Social Forces*, *84*. **Pg. 451–471.**
21. Janz NK & Becker MH (1984). The Health Belief Model: a decade later. *Health Education Quarterly*, *11*. **Pg. 1-47.**
22. King, V., & Scott, M. (2005). A comparison of cohabiting relationships among older and younger adults. *Journal of Marriage and Family*, *67*. **Pg. 271–285.**
23. Lan, T., Chang, H., & Tai, T. (2006). Relationship between components of leisure physical activity and mortality in Taiwanese older adults. *Preventative Medicine*, *43*. **Pg. 36–41.**
24. Logan, R.A. & Tse, T. (2007). A multidiscipline conceptual framework for consumer health informatics. *Students Health Technology Information*, 129. **Pg. 1169-73.**
25. McCrae, R.R. (1984). Situational determinants of coping responses Loss, threat, and challenge. *Journal Peers Social Psychology*, *46.* **Pg. 919-928.**
26. Miller, S.M. (1987). Monitoring and blunting: validation of a questionnaire to assess styles of information seeking under threat. *Journal Peers Social Psychology*, *52*. **Pg. 345-353.**
27. Miller, S.M. (1995). Monitoring versus blunting styles of coping with cancer influence the information patients want and need about their disease: implications for cancer screening and management. *Cancer*, *76*. **Pg. 167-177.**
28. Ross, L., Kohler, C.L., Grimley, D.M., Green, B.L. & Anderson-Lewis, C. (2007). Toward a model of prostate cancer information seeking: identifying salient behavioral and normative beliefs among African American men. *Health Educ Behav*, *34*. **Pg. 422-40.**
29. Rutledge, T., Matthews, K., Lui, L., Stone, K., & Cauley, J. (2003). Social networks and marital status predict mortality in older women: Prospective evidence from the study of osteoporotic fractures (SOF). *American Psychosomatic Society*, *65*. **Pg. 688–694.**
30. Shroff, F. (2011). We are all one! A yogic travel tale, *Post Colonial Culture Societies*, *20*. **Pg. 124-138.**
31. Shroff, F. (2011). Conceptualizing holism in international interdisciplinary critical perspective: Toward a framework for understanding holistic health, *Social Theory Health,* 9. **Pg. 244-255.**

32. Spotts, E., Pedersen, N., Neiderhiser, J., Reiss, D., Lichtenstein, P., Hansson, K., et al. (2005). Genetic effects on women's positive mental health: Do marital relationships and social support matter? *Journal of Family Psychology*, *19*. **Pg. 339–349.**
33. Steptoe, A., Sutcliffe, I., Allen, B. & Coombes, C. (1991). Satisfaction with Communication, Medical Knowledge, and Coping Style in Patients with Metastatic Cancer. *Social Science Medicine*, *32*. **Pg. 627-632.**
34. Thoits, P. A. (1982). Conceptual, methodological, and theoretical problems in studying social support as a buffer against life stress. *Journal of Health and Social Behavior*, *23*. **Pg. 145–159.**
35. Tower, R., Kasl, S., & Moritz, D. (1997). The influence of spouse cognitive impairment on respondents' depressive symptoms: The moderating role of marital closeness. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, *52*. **Pg. 270–278.**
36. Wheaton, B. (1985). Models for the stress-buffering function of coping resources. *Journal of Health and Social Behavior*, *26*. **Pg. 352–364.**
37. Williams-Piehota, P., Pizarro, J., Schneider, T.R., Mowad, L. & Salovey, P. (2005). Matching health messages to monitor-blunter coping styles to motivate screening mammography. *Health Psychology*, *24*. **Pg. 58-67.**
38. Witte, K. (1992). Putting the fear back in fear appeals: The extended parallel process model. *Communication Monographs*, *59*. **Pg. 329-349.**